

## **II. REMARKS**

### **A. *Disposition of the Claims***

Claims 1-16 were pending as of the present Office Action, which sets forth that:

Claims 10-16 are allowed;

Claims 1-9 are rejected under 35 U.S.C. 112;

Claims 1-3 and 7-9 are rejected under 35 U.S.C. 102(e) over U.S. Patent 6,191,408 B1 to Shinotsuka et al. (Shinotsuka);

Claims 1 and 7-9 are rejected under 35 U.S.C. 103(a) over U.S. Patent 6,075,562 to Sakaguchi et al. (Sakaguchi) in view of U.S. Patent 4,973,833 to Takada et al. (Takada);

Claims 1 and 7-9 are rejected under 35 U.S.C. 103(a) over U.S. Patent 5,335,072 to Tanaka et al. (Tanaka) in view of Takada; and

Claims 4-6 set forth allowable subject matter.

### **B. *Claim Amendments***

Claim 1 has been amended to more particularly point out and distinctly claim the invention. Claim 2 has been amended to correct a minor clerical error. Claim 10 has been amended to improve the grammar thereof.

Claim 17 has been added to provide a more adequate basis for protection of the present invention.

### **C. *Claim Rejections - 35 U.S.C. § 112***

Claims 1-9 are rejected under the second paragraph of 35 U.S.C. 112(e) as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Office Action states that the claims are indefinite because, without claiming where the temperature sensor is positioned in claim 1, the ambient temperature could be any temperature. By this Amendment, claim 1 has been amended to correct the noted informality by clarifying that "the temperature sensor is positioned in the image sensor." Accordingly, it is respectfully requested that the rejection

of claims 1-9 under the second paragraph of 35 U.S.C. 112(e) be reconsidered and withdrawn.

**D. Claim Rejections - 35 U.S.C. § 102**

The rejection of claims 1-3 and 7-9 under 35 U.S.C. 102(e) over Shinotsuka is respectfully traversed based on the following.

Claim 1, as amended, recites *inter alia*:

an image sensor including:

...

an output circuit that includes a temperature sensor...positioned in the image sensor.

Thus, claim 1 requires an image sensor that includes an output circuit having a temperature sensor positioned in the image sensor.

Shinotsuka is directed to a signal processing apparatus. One embodiment disclosed in Shinotsuka, shown in Fig. 12, includes a correcting device 60 that receives a signal  $V_o$  from an image sensor and receives a temperature signal  $T$  from a temperature sensor 14, which is disposed apart from the image sensor. Shinotsuka fails to provide any suggestion or motivation for positioning a temperature sensor **in** an image sensor as recited in claim 1. Given the teachings of Shinotsuka, one skilled in the art would only be exposed to teachings related to the use of an image sensor, a separate temperature sensor, and a corrector for using the information from each to achieve some result. Therefore, since Shinotsuka fails to disclose or suggest all of the limitations of claim 1, Shinotsuka cannot anticipate claim 1, or claims 2, 3, and 7-9 which depend from claim 1.

Accordingly, it is respectfully requested that the rejection of claims 1-3 and 7-9 under 35 U.S.C. 102(e) over Shinotsuka be reconsidered and withdrawn.

**E. Claim Rejections - 35 U.S.C. § 103**

**1. Sakaguchi in view of Takada**

The rejection of claims 1 and 7-9 under 35 U.S.C. 103(a) over Sakaguchi in view of Takada is respectfully traversed based on the following.

As pointed out above, claim 1 requires an image sensor that includes an output circuit having a temperature sensor positioned in the image sensor.

Sakaguchi is related to an image input apparatus that utilizes a CCD 103 as an image sensor. Image data from the CCD is provided to a digital signal processing section 106, which interfaces with a CPU 121. The CPU 121 also interfaces with a temperature sensor 130, which provides temperature information. This arrangement disclosed in Sakaguchi provides no suggestion or motivation for providing a temperature sensor in an image sensor. Sakaguchi instead only addresses the use of a standard CCD, a separate temperature sensor, and a processor that uses information from each.

Takada is silent with regard to temperature sensing. Therefore, even if one skilled in the art were to consider Sakaguchi in view of Takada, the resulting combination would still fail to disclose or suggest positioning a temperature sensor in an image sensor as recited in claim 1. Accordingly, since the combination of Sakaguchi and Takada fails to disclose or suggest all of the limitations of claim 1, the combination of Sakaguchi and Takada cannot render obvious claim 1, or claims 7-9 which depend from claim 1.

Accordingly, it is respectfully requested that the rejection of claims 1 and 7-9 under 35 U.S.C. 103(a) over Sakaguchi in view of Takada be reconsidered and withdrawn.

**2. Tanaka in view of Takada**

The rejection of claims 1 and 7-9 under 35 U.S.C. 103(a) over Tanaka in view of Takada is respectfully traversed based on the following.

As mentioned above, claim 1 requires an image sensor that includes an output circuit having a temperature sensor positioned in the image sensor.

Tanaka relates to a photographic system having an image sensor (CCD 2) that outputs a signal Vo to a separate correcting device (WB Corrector 5). The correcting device receives a temperature signal from a temperature sensor 17. The temperature sensor 17 is shown in Fig. 1A separate from both the correcting device and an image sensor. Tanaka fails to disclose or suggest positioning the temperature sensor in the image sensor as recited in claim 1, and, as mentioned above, Takada is silent with regard to temperature sensors. Therefore, even if one skilled in the art were to consider Tanaka in view of Takada, the resulting combination would still fail to disclose or suggest positioning the temperature sensor in the image sensor as recited in claim 1. Accordingly, since the combination of Tanaka and Takada fails to disclose or suggest all of the limitations of claim 1, the combination of Tanaka and Takada cannot render obvious claim 1, or claims 7-9 which depend from claim 1.

Accordingly, it is respectfully requested that the rejection of claims 1 and 7-9 under 35 U.S.C. 103(a) over Tanaka in view of Takada be reconsidered and withdrawn.

***F. New Claims***

New claim 17 has been added to provide a more adequate basis for protection of the present invention. Claim 17 depends from claim 1, and is considered to be in condition for allowance for at least the same reasons discussed above with regard to claim 1.

***G. Conclusion***

In view of the foregoing amendments and remarks, this application is considered to be in condition for allowance, and an early reconsideration and a Notice of Allowance are earnestly solicited.

This Amendment does not increase the number of independent claims, does not increase the total number of claims, and does not present any multiple dependency claims. Accordingly, no fee based on the number or type of claims is currently due. However, if a fee, other than the issue fee, is due, please charge this fee to Sidley Austin Brown & Wood LLP's Deposit Account No. 18-1260.

If an extension of time is required to enable this document to be timely filed and there is no separate Petition for Extension of Time filed herewith, this document is to be construed as also constituting a Petition for Extension of Time Under 37 C.F.R. § 1.136(a) for a period of time sufficient to enable this document to be timely filed and please charge the required fee to Sidley Austin Brown & Wood LLP's Deposit Account No. 18-1260.

Any other fee required for such Petition for Extension of Time and any other fee required by this document, other than the issue fee, and not submitted herewith should be charged to Sidley Austin Brown & Wood LLP's Deposit Account No. 18-1260. Any refund should be credited to the same account.

Respectfully submitted,

By: \_\_\_\_\_



Brian E. Harris  
Reg. No. 48,383  
Agent for Applicant

BEH/jkk  
SIDLEY AUSTIN BROWN & WOOD LLP  
717 N. Harwood, Suite 3400  
Dallas, Texas 75201  
Direct: (214) 981-3461  
Main: (214) 981-3300  
Facsimile: (214) 981-3400  
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